

AMENDMENTS TO THE CLAIMS

Please cancel Claims 1-27.

Please add the following new claims:

1 28. (new) An electronic device supporting both battery identification and
2 communication of data over an interface between a battery and the electronic device,
3 comprising:
4 a resistor having a resistance value;
5 a processor configured to calculate a resistance in the battery responsive to the
6 resistance value and a voltage drop across the resistor; and
7 circuitry for enabling communication of data between the processor and the
8 battery.

1 29. (new) The electronic device of Claim 28 wherein the circuitry for enabling
2 communications, comprises:
3 a transceiver for transmitting and receiving serial communications between
4 the electronic device and the communications circuitry of the battery;
5 a first register for holding data to be transmitted by the transceiver; and
6 a second register for holding data received by the transceiver.

1 30. (new) A method enabling both battery identification and communication of
2 data over an interface between a battery and an electronic device, comprising the steps of:
3 attempting to communicate data to the battery from the electronic device via a
4 serial connection responsive to a connection between the battery and the electronic device;
5 selectively switching a resistor in the electronic device between system
6 voltage and a communications pin if the electronic device may not communicate data to the
7 battery; and
8 determining a first resistance value in the battery responsive to the impedance in the
9 electronic device.

1 31. (new) An electronic device supporting both battery identification and
2 communication of data over an interface between a battery and the electronic device,
3 comprising:
4 a current source providing a current value;
5 a processor configured to calculate a resistance in the battery responsive to the
6 current value and a voltage drop value at an input to the electronic device; and
7 circuitry for enabling communication between the processor and the battery.

1 32. (new) The electronic device of Claim 31 wherein the circuitry for enabling
2 communications, comprises:
3 a transceiver for transmitting and receiving serial communications of data
4 between the electronic device and the communications circuitry of the battery;

5 a first register for holding data to be transmitted by the transceiver; and
6 a second register for holding data received by the transceiver.

1 33. (new) A method enabling both battery identification and communication over
2 an interface between a battery and an electronic device, comprising the steps of:
3 attempting to communicate with the battery from the electronic device via a
4 serial connection responsive to a connection between the battery and the electronic device;
5 selectively switching a current source in the electronic device between system
6 voltage and a communications pin if the electronic device may not communicate with the
7 battery; and
8 determining a first resistance value in the battery responsive to a current value
9 provided by the current source.